

**ABSTRACT OF THE DISCLOSURE**

A reconditioning system for extending the reach of a RF communication  
5 signal using a high voltage cable and a neutral conductor as a communication  
channel. A reconditioner of the reconditioning system is either a repeater or a  
regenerator and is coupled to the high voltage cable using novel high voltage  
couplers. The system has an isolation filter for segmenting the high voltage  
cable in order to limit interference of RF signals on different parts of the high  
10 voltage cable.